

## AMENDMENTS

### In the Claims:

Please cancel claim 2 without prejudice.

Please amend claims 1, 6 and 16 as follows:

A1 1. (Amended) A post-processing system for remotely accessing patient information and data previously acquired and electronically stored, and for remotely generating a volume data rendering result, comprising:

at least one receiving station controllable by at least one user of said system;

at least one transmitting station physically separated from said receiving station for communicatively coupling to said receiving station through at least one network;

user interface means provided at said receiving station for enabling a user to specify at least one patient volume data set previously acquired and stored in said transmitting station, and to specify at least one request for volume data rendering comprising specifying a volume data rendering method and rendering parameters to be applied on said volume data set;

an image processor at said transmitting station interactively controllable at said receiving station to generate a partial or complete volume data rendering result in real time by processing said volume data set using said volume data rendering method and rendering parameters specified by said user;

a data transmitter provided at said transmitting station for transmitting said processed result to said receiving station; and

display means for displaying the requested rendering result and rendering parameters at said receiving station.

A2 6. (Amended) The system of claim 1 wherein:  
said receiving station includes means for computing the remaining part of said rendering result.

A3 15/16. (Amended) The system of claim 1 wherein:  
said user interface means comprises means for enabling said user  
to specify different data rendering requests resulting from different  
rendering parameters, different rendering methods, and/or different data sets from one or  
multiple data acquisition methods, and  
to specify a method to integrate said different data rendering results into at  
least one composite rendering result; and  
said display means for presenting at said receiving station said composite  
rendering result and a plurality of parameters used for generating said composite rendering  
result.

Please add the following new claims:

A4 16/17. (New) The system of claim 1, wherein said display means, user interface means  
and image processor are configured for enabling said user to interactively view said displayed  
requested rendering result and parameters and specify adjusted volume data rendering methods  
and parameters to generate updated rendering results.

17/18. (New) The system of claim 1, wherein said transmitting station and said image  
processor are couplable to a plurality of receiving stations for serving multiple receiving stations  
concurrently.

18/19. (New) The system of claim 1, wherein said transmitting station is implemented  
with a plurality of computers.

19 20. (New) A method for locally generating a volume data rendering result in accordance with a remote request for processing of previously acquired and locally stored patient information and data, comprising:

locally storing at least one patient volume data set;

locally receiving an identification of at least one specified patient volume data set and at least one request for volume data rendering from a remote user, the request for volume data rendering comprising a volume data rendering method and rendering parameters to be applied on said specified patient volume data set;

locally generating a partial or complete volume data rendering result in real time by processing said specified patient volume data set using said volume data rendering method and rendering parameters received from said remote user; and

locally transmitting said processed result for remotely displaying said requested rendering result and said rendering parameters.

20 21. (New) The method of claim <sup>19</sup>20, further comprising:

locally receiving new requests for volume data rendering interactively issued by said remote user based on feedback from said displayed requested rendering result and said rendering parameters, said new requests comprising an adjusted volume data rendering method and adjusted rendering parameters;

locally generating an updated partial or complete volume data rendering result in real time by processing said specified patient volume data set using said adjusted volume data rendering method and adjusted rendering parameters; and

repeating said new requests for volume data rendering and said generation of said updated partial or complete volume data rendering result until a desired rendering result is achieved.